

AMENDMENTS TO THE CLAIMS

The following listing of claims will replace all prior versions, and listing of claims in the application:

LISTING OF CLAIMS:

1. (Currently amended) A current sense apparatus comprising:
an output stage connected between a high voltage and a low voltage for
producing a phase output current, a mirror current proportional to
the phase output current, and a sense voltage; and
a servo amplifier for converting the mirror current to a current sense
signal, the servo amplifier including:
an operational amplifier having an inverting input connected with the
mirror current, a non-inverting input connected with the sense
voltage, and an output; and
a MOSFET having a source connected with the inverting input of the
operational amplifier, a gate connected with the output of the
operational amplifier, and a drain for providing the current sense
signal.

2. (Original) The apparatus of claim 1, wherein the output stage comprises:

a phase output node;

a common drain DMOSFET connected between the high voltage and
phase output node; and

a MOSFET connected between the low voltage and phase output node.

3. (Original) The apparatus of claim 2, wherein the common drain DMOSFET has a gate, a drain connected to the high voltage, a source connected to the phase output node, a current mirror terminal for providing the mirror current, and a sense terminal for providing the sense voltage.

4. (Original) The apparatus of claim 1, wherein the output stage comprises:

a phase output node;

a MOSFET connected between the high voltage and phase output
node; and

a common drain DMOSFET connected between the low voltage and

phase output node.

5. (Original) The apparatus of claim 4, wherein the common drain DMOSFET has a gate, a drain connected to the phase output node, a source connected to the low voltage, a current mirror terminal for providing the mirror current, and a sense terminal for providing the sense voltage.

Claims 6 – 19 (Cancelled).